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ABSTRACT

The glossary is one of twenty in various subject areas of vocational education designed to assist the student in vocabulary mastery for particular vocational education courses. They are part of the Vocational Reading Power Project, Title III, E.S.E.A. This glossary is for a course in industrial electricity. It is divided into two parts: one provides the student with two definitions for each term listed; the second part lists the same words with space for the student's definition. It is intended that upon completion of the course, mutually agreeable definitions for each term will be arrived at by the instructor and the students. These definitions will be made available to future students taking the course. (AG)

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INDUSTRIAL ELECTRICITY
Glossary of Key Words

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Vocational Reading Power
E.S.E.A. Title III

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To The Student

This Glossary of Key Words was prepared to help you in your course. The words that follow were judged by your instructor to be the most important for you to understand.

Directions

The Glossary is divided into two parts. The first part lists the key words at the left side of the page. Across from the key words are two definitions for that word. The "A" definition is more difficult and specific. The "B" definition is easier and more general. During a learning activity, you are to use both definitions to help you understand. After the learning activity, you are to write your definition of the word as you understand it.

The second part just lists words. There is space for you to write your understanding of those words. Also, at the end of the booklet are blank lines. Here, you and your instructor will list and define the words which were left out.

At the end of the course, your definitions and the instructor's definitions will be joined together. These will be printed and given to the students who come after you have graduated. It is hoped that, with your help, the future students of vocational education will be greatly benefited.

a) PRIMARY
b) SECONDARY

AC	a) Abbreviation for alternating current. b) Same.
AC - DC	a) Electronic equipment capable of operation from either an a-c or d-c primary power source. b) Referring to a device which can be operated on either a-c or d-c.
ALLIGATOR CLIP	a) A spring-loaded metal clip with long narrow meshing jaws. b) Same as above. Used for making temporary connections.
ALTERNATING CURRENT	a) A current that reverses its direction periodically. During each cycle it reaches a maximum in one direction, decreases to zero, then reverses itself and reaches maximum in the opposite direction. b) A current flowing back and forth in a wire. It reverses itself continuously.
AMMETER	a) An instrument for measuring either direct or alternating electric current (depending on its construction). Its scale is usually calibrated in amperes, milliamperes, micro-amperes or kiloamperes. b) This is a short form of the word AMPERE-METER. It is an instrument for measuring electric current. DC-ammeters work on DC only. AC-ammeters should only be used with in AC-circuits.
AMPERE	a) Rate of flow of electrons. A flow of one coulomb per second equals one ampere. b) The basic unit for measuring electrical current.
ARMATURE	a) The moving element in an electro-mechanical device such as the rotating part of a generator or motor, the movable part of a relay, or the spring-mounted iron portion of a bell or buzzer. b) In a motor or generator, the rotating part. In relays or bells, the vibrating part.

AC

AC - DC

ALLIGATOR CLIP

ALTERNATING CURRENT

AMMETER

AMPERE

ARMATURE

a) PRIMARY
b) SECONDARY

AUTO-TRANSFORMER

a) A transformer with a single winding, this whole winding acting as the primary and only part of it acting as the secondary winding.
b) A transformer with a single coil of wire only. This coil is made to serve as input winding (primary) as well as output winding (secondary).

BREAKER

a) See circuit breaker.
b) A short form of the word Circuit Breaker.

BUZZER

a) A signaling device in which an armature vibrates to produce a raucous, nonresonant sound.
b) A device similar to a doorbell but without hammer or gong. It produces a sound by vibration of the armature.

CARBON

a) One of the chemical elements consisting of a nonmetalic conductive material occurring in graphite, charcoal, etc. Its resistance is fifty to several hundred times that of copper.
b) A material often used in making electrical devices which require resistance.

CAPACITANCE

a) Also called capacity. In a capacitor or a system of wires and dielectrics, that property which permits the storage of electrical charges. Often described as that property of a circuit which opposes a change in voltage.
b) The storage ability of a capacitor measured in units called FARADS or MICROFARADS.

CAPACITOR

a) A device consisting essentially of two conducting surfaces separated by an insulating material or dielectric such as air, paper, mica, glass, plastic film, or oil.
b) An important part of radios, TV, and other electronic devices. It serves to store electrical energy (or charges). Its ability to store charges is measured in units called FARAD or MICROFARAD. Capacitors come in many different sizes and shapes.

AUTO-TRANSFORMER

BREAKER

BUZZER

CARBON

CAPACITANCE

CAPACITOR

a) PRIMARY
b) SECONDARY

CARTRIDGE

a) A removable phonograph pickup.
b) A removable part at the head of phonograph pick-up arm. The cartridge holds the needle (called stylus). It changes the vibrations of the stylus into an electric voltage (called the signal).

CATHODE RAY TUBE

a) Abbreviated CRT. A tube in which its electron beam can be focused to a small cross-section on a luminescent screen and can be varied in position and intensity to produce a visible pattern.
b) A tube with a long neck behind a viewing screen. (A picture tube). The screen is phosphor-coated to make visible a high speed electron beam which is accelerated inside the neck of the tube.

CELL

a) A single unit that produces a direct voltage by converting chemical energy into electrical energy.
b) A single unit battery. There are Dry Cells (such as flashlight batteries), and Wet Cells (as found in car batteries).

CIRCUIT

a) The interconnection of a number of devices in one or more closed paths to perform a desired electrical or electronic function.
b) A system in which conductors (wires) are used to connect together: a power source, such as a battery; a load which utilizes electrical energy, such as a lamp; and a control such as a switch.

CIRCUIT BREAKER

a) An automatic device which, under abnormal conditions, will open a current-carrying circuit without damaging itself.
b) A device to protect an electrical circuit against overloads. It does the same job as a fuse but does not have to be replaced when it blows. It looks somewhat like a light switch (toggle switch).

COIL

a) A number of turns of wire wound around an iron core or onto a form made of insulating material, or one which is self-supporting.
b) An insulated wire wrapped tightly around a piece of iron or around some other material. The loops are closely wound. In other words, each turn is right next to the other.

CARTRIDGE

CATHODE RAY TUBE

CELL

CIRCUIT

CIRCUIT BREAKER

COIL

a) PRIMARY
b) SECONDARY

COMMUTATOR

a) The part of the armature to which the coils of the motor armature are connected. It consists of wedge-shaped copper segments around a steel hub and insulated from it and from one another.
b) A copper band on the shaft of some generators and motors. The copper band is made up of small strips of copper. Carbon brushes ride on a commutator, supplying electrical current.

COMPONENT

a) An essential functional part of a subsystem or equipment. It may be any self-contained element with a specific function, or it may consist of a combination of parts.
b) A part of an electrical system or circuit. Example: the battery is a component of a flashlight.

CONDUIT

a) A tubular raceway for holding wires or cables designed and used expressly for this purpose.
b) A tube similar to water pipe. It is used to hold and protect electric wires.

CONTACT

a) One of the current-carrying parts of a relay, switch, or connector that are engaged to open or close the associated electrical circuits.
b) That part of a switch which opens or closes the circuit.

CURRENT

a) The movement of electrons through a conductor. Measured in amperes, and its symbol is I.
b) A flow of electrons from negative to positive.

CYCLE

a) The change of an alternating wave from zero to a positive peak, back to zero, then to a negative peak and back to zero.
b) One complete reversal of an alternating current from positive to negative and back to the starting point.

DATA

a) A general term used to denote any or all facts, numbers, letters, and symbols, or facts that refer to or describe an object, idea, condition, or situation.
b) Basic elements of information given in numbers, letters, or symbols.

COMMUTATOR

COMPONENT

CONDUIT

CONTACT

CURRENT

CYCLE

DATA

a) PRIMARY
b) SECONDARY

DC

a) An abbreviation for direct current.
b) Same.

DEFLECTION

a) Movement of the electron beam in a cathode-ray tube as electro-magnetic or electrostatic fields are varied to cause the light spot to traverse the face of the tube in a pre-determined pattern.
b) 1. The movement or bending of an electron beam, such as in picture tubes.
2. The deviation from zero that a needle on a meter points to.

DEVICE

a) A single discrete conventional electronic part such as a resistor or transistor.
b) A part of a larger system; a piece of equipment.

DIELECTRIC

a) The insulating medium between the two plates of a capacitor, such as air, wax-impregnated paper, plastic, mica, and ceramic.
b) The insulator in a capacitor.

DIODE

a) A two-terminal device which will conduct electricity more easily in one direction than in the other.
b) A device that permits current to flow in one direction only. In other words: a one-way "street" for electron flow. Used as rectifiers to change AC into DC.

DIRECT CURRENT

a) An essentially constant value current that flows in only one direction.
b) Current flowing in one direction only (from negative to positive).

DISSIPATION

a) Loss of electrical energy as heat.
b) Same.

ELECTRODE

a) 1. In tubes or transistors a condcuting element that does one or more of the following: emit or collect electrons, or controls their movement.
2. A conductor by means of which a current passes into or out of a fluid or an organic material.
b) 1. An element inside an electron tube.
2. A terminal or connector of an apparatus used in treatment of diseases.
3. The elements in a cell.

DC

DEFLECTION

DEVICE

DIELECTRIC

DIODE

DIRECT CURRENT

DISSIPATION

ELECTRODE

a) PRIMARY
b) SECONDARY

ELECTROLYTIC (CAPACITOR)

a) A capacitor consisting of two conducting electrodes, with the anode having a metal oxide film formed on it. The film acts as the dielectric.
b) A capacitor operating on chemical principles. This permits to pack large capacity into a small container. Its terminals are polarized (+ and -). Often used in filter circuits.

ELECTRO MAGNET

a) A temporary magnet consisting of a solenoid with an iron core.
b) A coil of wire which behaves like a magnet. To do this, an electric current must flow through the coil. Many turns of wire make a strong magnet.

ELECTROMOTIVE FORCE

a) The force which causes an electric current to flow when there is a difference of potential between two points.
b) EMF has the same meaning as the words Potential Difference or Voltage. (See definition of voltage) it is measured in volts.

ELECTRON

a) One of the natural elementary constituents.
b) An invisible particle with a negative charge.

ELECTRONIC

a) Pertaining to that branch of science which deals with the motion, emission, and behavior of currents of free electrons, especially in vacuum, gas, or phototubes and semiconductors. This is contrasted with electric, which pertains to the flow of large currents in metal conductors.
b) Refers to equipment using electron tubes or transistors. Also applies to installations where the energy can be transmitted through air, such as in radio and TV broadcasting.

ELEMENT (1)

a) One of the 104 known chemical substances that cannot be divided into simpler substances by chemical means.
b) One of the "building blocks" of nature. Everything that exists is made up of elements.
Examples: oxygen, iron, sulfur, and many others, altogether 104.

ELECTROLYTIC (CAPACITOR)

ELECTRO MAGNET

ELECTROMOTIVE FORCE

ELECTRON

ELECTRONIC

ELEMENT (1)

a) PRIMARY
b) SECONDARY

ELEMENT (2)

a) Any electrical device with terminals at which it may be connected directly to other electrical devices.
b) Devices which are part of other electrical equipment. Example: A heating element inside a kitchen range.

E.M.F.

a) An abbreviation for electro-motive force.
b) Same as above.

FARAD

a) The capacitance of a capacitor in which a charge of one coulomb produces a change of one volt between its terminals.

Mathematically: $C = \frac{Q}{V}$

b) A unit of measurement for capacitors. A more practical unit is the MICRO-FARAD ($\frac{1}{1,000,000}$ of a FARAD)

FILAMENT

a) The resistance wire or ribbon inside a lamp or electron tube, which is heated by passing a current through it. (The heating element in vacuum tubes.)
b) Same.

FLUX (1)

a) A substance used to promote the joining of metals in soldering.
b) A paste or liquid used in the soldering process. Rosin is mostly used in soldering electrical circuits. Often times the flux is already part of the soldering wire, (core-solder).

FLUX (2)

a) Pertaining to magnetic lines of force.
b) The invisible lines of force near the poles of a magnet.

FREQUENCY

a) The number of recurrences of a periodic phenomenon in a unit of time. The number of cycles per second of a wave motion.
b) In alternating current, the number of cycles per second.

ELEMENT (2)

EMF

FARAD

FILAMENT

FLUX (1)

FLUX (2)

FREQUENCY

a) PRIMARY
b) SECONDARY

FUSE

a) A protective device, usually containing a short piece of wire which melts and breaks the circuit when the current exceeds the rated value.
b) A device used to protect a circuit against overloads. If too much current flows, the fuse will "blow," thereby interrupting fuses or cartridge fuses.

FUSETRON

a) A screw-plug fuse that permits up to 50% overload for short periods of time without blowing.
b) A special type of fuse with built-in time delay. Used in motor circuits where brief periods of overload exist during the starting.

HENRY

a) Abbreviated - H. The measure of inductance. One henry of inductance is present in a circuit, when a current variation of one ampere per second induces one volt.
b) A unit of inductance. Coils are rated in henries.

INCANDESCENT LAMP

a) An electric lamp in which electric current flowing through a filament of resistance materials heats the filament until it glows.
b) A lamp in which a resistance wire reaches such high temperature that it gives off light.

INDUCTANCE

a) In a circuit, the property which opposes any change in the existing current. Inductance is present only when the current is changing.
b) A word related to coils opposing any change in their current. Also, the ability of a coil to induce a voltage when the current is being changed. Inductance is measured in units called Henries. The letter I stands for inductance.

INDUCTOR

a) A conductor used for introducing inductance into an electric circuit. The conductor is wound into a spiral, or coil, to increase its inductive intensi
b) Another word for COIL.

INSULATOR

a) A material of such extremely low conductivity that, in effect, no current flows through it.
b) A substance of such high resistance that it prevents the flow of current.

FUSE

FUSETRON

HENRY

INCANDESCENT LAMP

INDUCTANCE

INDUCTOR

INSULATOR

a) PRIMARY
b) SECONDARY

KILO

a) A prefix meaning 10^3.
b) A practical unit meaning a number times 1,000

Example: 5KILO-OHM = 5,000 OHMS

MANUAL(1)

a) A small book giving information or instruction. Example: a repair manual.
b) Same.

MANUAL(LY) (2)

a) Hand operated.
b) Hand operated.

MEGA

a) A prefix meaning 10^6.
b) A practical unit meaning a number times 1,000,000. Example: 5 MEGA-OHMS = 5,000,000 OHMS

MEG-OHM

a) A unit of resistance equal to 10^6 ohms.
b) A resistance of 1,000,000 ohms.

METER

a) Any measuring device; specifically, any electrical or electronic measuring instrument.
b) An instrument for measuring electrical quantities. Examples: Voltmeter, Ammeter, Ohmmeter, etc.

MICRO

a) A prefix meaning 10^{-6}.
b) A practical unit meaning $\frac{1}{1,000,000}$ of a unit.

MICROPHONE

a) An electroacoustic transducer which responds to sound waves and delivers essentially equivalent electric waves.
b) A device which changes sound waves into alternating current signals.

MILLI

a) A prefix meaning 10^{-3}.
b) A practical unit meaning $\frac{1}{1,000}$ of a unit.

MILLI-AMPERE

a) A unit of current equal to 10^{-3} amperes.
b) A unit of electrical current equal to $\frac{1}{1,000}$ of an ampere.

KILO

MANUAL (1)

MANUAL(LY) (2)

MEGA

MEG-OHM

METER

MICRO

MICROPHONE

MILLI

MILLI-AMPERE

a) PRIMARY
b) SECONDARY

MULTIMETER

a) Several instruments or instrument circuits combined in a single enclosure and used in measuring two or more electrical quantities in a circuit.
b) An instrument used for measuring different electrical quantities. VOMs and VTVMs are examples of multimeters. (See VOM or VTVM)

NEGATIVE TERMINAL

a) In a battery or other voltage source, the terminal having an excess of electrons.
b) A point from which electrons flow through a circuit.

NEON

a) An inert gas used in neon signs and some electron tubes. It produces a bright red glow when ionized.
b) A special gas used in certain lamps.

NORMALLY (OPEN OR CLOSED)

a) The phrase normally open or normally closed refers to the switching contacts of a relay when the control circuit is not energized.
b) A condition as it would exist if all electrical power were turned off.

OHM

a) The unit of electrical resistance, symbolized by the Greek letter OMEGA.
One ohm is the value of resistance through which a potential difference of one volt will maintain a current of one ampere.
b) The unit of measurement for electrical resistance.

OHM METER

a) A direct-reading instrument for measuring electric resistance.
b) An instrument used for measuring resistance.

OSCILLATOR

a) An electronic device which generates a-c power at a frequency determined by the values of certain constants in its circuit. It may be considered to be an amplifier with positive feedback.
b) A high-frequency a-c generator without moving parts.

OSCILLOSCOPE

a) An instrument primarily for making visible the instantaneous values of one or more rapidly varying electrical quantities as a function of time, or of another electrical or mechanical quantity.
b) An instrument used for showing the waveform of a-c voltages. It shows how the value of such voltage changes with time.

MULTIMETER

NEGATIVE TERMINAL

NEON

NORMALLY (OPEN OR CLOSED)

OHM

OHM METER

OSCILLATOR

OSCILLOSCOPE

a) PRIMARY
b) SECONDARY

PANEL

a) An electrical switchboard or instrument panel.
b) Same.

PARALLEL CIRCUIT

a) Devices connected to the same pair of terminals so that the current can branch out over two or more paths.
b) A circuit which contains two or more paths for the current to flow through. These pathways, called branches, are supplied by a common voltage.

PERIOD

a) The time required for one complete cycle of a regular, repeating series of events. Mathematically:

$$t = \frac{1}{f}$$ where t is in seconds and f is frequency in Hertz

b) The time it takes to complete an a-c waveform from its beginning to its end. The time for such a cycle is measured in seconds.

PERMEABILITY

a) The measure of how much better a given material is than air as a path for magnetic lines of force. Air is assumed to have a permeability of one.
b) The ability of a substance to conduct magnetic lines of force, as compared with air.

PHASE (1)

a) The angular relationship between current and voltage in a-c circuits.
b) This word describes a condition in a-c circuits, when the voltage and the current are sometimes "out of step" with one another. One may be slightly ahead of the other. The amount of this phase-difference is measured in degrees.

PHASE (2)

a) The number of separate voltage waves in a commercial a-c supply.
b) Same as above.
Example: Single phase means a system of a single voltage between two wires. Three-phase means a system which combines three voltages between three wires.

PANEL

PARALLEL CIRCUIT

PERIOD

PERMEABILITY

PHASE (1)

PHASE (2)

a) PRIMARY
b) SECONDARY

PICTORIAL (DIAGRAM)

a) A wiring diagram containing actual sketches of components and clearly showing all connections between them.
b) A picture diagram showing the actual circuit layout.

PLATE

a) The principal electrode to which the electron stream is attracted in an electron tube.
b) Another word for the word ANODE. This is the part of an electron tube which attracts the electrons.

POLARITY

a) A condition by which the direction of current flow can be determined. Having two opposite charges.
b) The property of a device or circuit to have poles, such as North and South, or Positive and Negative.

POSITIVE

a) Any point to which electrons are attracted, as opposed to negative, from where they come.
b) A point in the circuit having a shortage of electrons.

POTENTIOMETER

a) An electromechanical device having a terminal connected to each end of the resistive element, and a third terminal connected to the wiper contact. Used as a voltage divider, a device used to develop electrical output signals proportional to mechanical movement.
b) A variable resistor with three contacts. Used for changing the voltage output of a circuit or power supply.

POWER

a) The rate at which work is done. Units of power are the watt, the joule, and the kilowatt.
b) The amount of work done in a certain amount of time.

POWER SUPPLY

a) A unit that supplies electrical power to another unit. It rectifies the ac and maintains a constant voltage output within limits.
b) Equipment designed to provide various a-c and d-c voltages.

RANGE

a) The difference between the maximum and the minimum of a variable.
b) A number value which suggests "how much" can be expected of a certain equipment.
Example: The range of a meter is 10 volts. This means that no more than 10 volts can be measured.

PICTORIAL (DIAGRAM)

PLATE

POLARITY

POSITIVE

POTENTIOMETER

POWER

POWER SUPPLY

RANGE

a) PRIMARY
b) SECONDARY

REACTANCE

a) Symbolized by the letter X. Opposition to the flow of alternating current. Capacitive Reactance (X_C) is the opposition offered by capacitors. Inductive Reactance (X_L) is the opposition offered by a coil. Both reactances are measured in OHMS.
b) The opposition to a-c current offered by coils and capacitors. Like resistance, reactance is measured in ohms.

RECTIFIER

a) A device which, by virtue of its asymmetrical conduction characteristic, conducts an alternating current into a unidirectional current.
b) A diode (or system of diodes) which changes a-c into d-c.

RELAY

a) An electromechanical device in which contacts are opened and/or closed by variations in the conditions of one electric circuit and thereby affect the operation of other devices in the same or other electric circuits.
b) An electro-magnetic switch.

RESET

a) To restore a device to its prescribed state.
b) A word often used to mean the closing of a circuit-breaker after it has tripped open.

RESISTANCE

a) A property of conductors which, - depending on their dimensions, material, and temperature, determines the current produced by a given voltage. The practical unit of resistance in the ohm.
b) The property of a circuit which opposes the flow of current. Resistance is measured in units called ohms.

RESISTOR

a) A device which resists the flow of current.
b) A component of electronic circuits. Used to control the amount of resistance in the circuit.

RESONANCE

a) A circuit condition whereby the inductive and capacitive reactance components of a circuit have been balanced. ($X_L = X_C$)

b) A circuit condition in which the effect of a coil (inductance) is cancelled out by the effect of the capacitor. The circuit then behaves as if these components were removed.

REACTANCE

RECTIFIER

RELAY

RESET

RESISTANCE

RESISTOR

RESONANCE

a) PRIMARY
b) SECONDARY

RHEOSTAT

a) A variable resistor which has one fixed terminal and a movable contact.
b) A variable resistor with two contacts only. (If there are three contacts, only two will be used.) Rheostats are used to vary the current in a circuit.

SCHEMATIC

a) Also called schematic circuit diagram. A diagram of the electrical scheme of the circuit, with components represented by graphical symbols.
b) Diagram of an electronic circuit showing connections and identification of components.

SCOPE

a) Slang for a cathode-ray oscilloscope.
b) Short form for the word OSCILLOSCOPE, see that definition.

SERIES CIRCUIT

a) A circuit in which resistances or other components are connected end to end so that the same current flows throughout the circuit.
b) A circuit in which there is one path only for the current to flow in. The current is the same everywhere in a series circuit.

SHUNT

a) Any part connected, or the act of connecting any part, in parallel with some other part.
A precision low-value resistor placed across the terminals of an ammeter to extend its range.
b) A component connected in parallel to some other part of a circuit.
A resistor connected parallel to an ammeter to increase its range.

SOCKET

a) An opening that supports and electrically connects to vacuum tubes, bulbs or other devices.
b) The screw shell which serves as a holder for light bulbs. Also: holders for plug in connections of electron tubes, transistors, and other devices.

SOLAR

a) Pertaining to the sun. Operating by the light of the sun.
b) Same. Note: Electrical solar equipment does not necessarily require sunshine, but works equally well with artificial light.

RHEOSTAT

SCHEMATIC

SCOPE

SERIES CIRCUIT

SHUNT

SOCKET

SOLAR

a) PRIMARY
b) SECONDARY

SOLENOID

a) An electromagnet having an energized coil approximately cylindrical in form and an armature (plunger), the motion of which is reciprocating within and along the axis of the coil.
b) A coil of wire which acts like a magnet, pulling a movable iron core.

SUPPLY VOLTAGE

a) The voltage obtained from a power supply to operate a circuit.
b) Same.

SYMBOL

a) A simplified design representing a part in a schematic diagram.
b) A sign or drawing which represents an electrical part in a diagram.

TESTLEAD

a) A flexible insulated lead used chiefly for connecting meters and test instruments to a circuit under test.
b) A flexible wire used for quick, temporary connection. Often red or black colored.

TERMINAL

a) A point of connection for two or more conductors in an electrical circuit.
b) A point where wires are connected.

THERMO COUPLE

a) A device producing a voltage difference between two electrical conductors of dissimilar metals when heat is applied to the junction of these two conductors. The voltage produced is proportional to the amount of heat applied.
b) A device which changes heat energy into electricity. It is made of two different kinds of metal which are joined together at one end. Heating this junction end will produce a voltage.

TOLERANCE

a) A permissable deviation from a specified value. Often expressed as a percentage.
b) The number which limits the permissable error of a value. Example: 100 volts + 10%
This means: Any value between 90 and 110V is acceptabl

SOLENOID

SUPPLY VOLTAGE

SYMBOL

TESTLEAD

TERMINAL

THERMO COUPLE

TOLERANCE

a) PRIMARY
b) SECONDARY

TRANSFORMER

a) An electrical device which, by electromagetic induction, transforms electric energy from one circuit to another at the same frequency but usually at a different voltage and current value.
b) A very efficient device used to "step up" or to "step down" a-c voltages. It consists of coils wound onto an iron core. There are no moving parts. Cannot be used on d-c.

TRANSISTOR

a) An active semiconductor device, usually made of silicon or germanium, having three or more electrodes. The three main electrodes are the emitter, base and collector. Conduction is by electrons and holes.
b) A small device used in electronic equipment to do the same jobs performed by electron tubes. They take up less space, and generate less heat than do the electron tubes.

VECTOR

a) A term for a symbol which denotes directed quantity, i. e., one which cannot be completely described in terms of both, magnitude and direction.
b) A line with an arrowhead, representing the direction and the strength of a force.
Example: WIND SPEED and DIRECTION.
AC voltages and currents can be expressed as vectors.

VOLT

a) The unit of measurement of electromotive force. It is equivalent to the force required to produce a current of one ampere through a resistance of one ohm.
b) The unit of measurement of electrical pressure or voltage. Abbreviated by the letter V.

VOLTAGE

a) Electromotive force which causes current to flow through an electrical conductor. Also, the greatest effective difference of potential between any two conductors of a circuit.
b) Electrical pressure between two points of different potential. Example: The electrical pressure between the positive and the negative pole of a battery. Letter symbol for voltage is V.

TRANSFORMER

TRANSISTOR

VECTOR

VOLT

VOLTAGE

a) PRIMARY
b) SECONDARY

VOLTMETER

a) An instrument for measuring potential difference.
b) An instrument for measuring electrical pressure in volts.

VOM

a) An abbreviation for Volt-Ohm-Millia-meter. A test instrument with several different functions and ranges.
b) Same.

VTVM

a) An abbreviation for vacuum-tube voltmeter, a multimeter which utilizes the rectifying and amplifying properties of electron tubes.
b) A multimeter used for measuring a-c and d-c voltages, as well as resistance. It must be plugged into a wall outlet.

ZERO ADJUSTMENT

a) In an ohmmeter, a potentiometer or other means of compensating for the drop in battery voltage with age.
b) A knob or wheel on the ohmmeter used to adjust the pointer to zero.

VOLTMETER

VOM

VTVM

ZERO ADJUSTMENT

CLUSTER WORDS

Ampere Hours

Ampere Turns

Ampliture Modulation

Audio Frequency

Audio Frequency Amplifier

Audio Frequency Oscillator

Audio Frequency Transformer

Audio Spectrum

Branch Circuit

Branch Circuit Current

Branch Circuit Fuse

Branch Circuit Protection

Branch Current

Bridge Circuit

Bridge Rectifier

Carbon Brush

Carbon Microphone

Carbon Resistor

Capacitance Input Filter

Capacitance Microphone

Capacitance Start-Induction Run Motor

Capacitive Reactance

Carrier Frequency

Cartridge Fuse

Cathode Bias

Cathode Bypass Capacitor

Cathode Follower

Cathode Ray Tube

Chassis Ground

Circuit Breaker Panel

Circuit Element

Circuit Parameter

Circuit Protection _____

_____

Common Base Amplifier _____

_____

Common Collector _____

_____

Common Emitter _____

_____

Conduit Fastener _____

_____

Conduit Fitting _____

_____

Conduit Hickey _____

_____

Conduit Strap _____

_____

Control Grid _____

_____

Control Panel _____

_____

Control Voltage _____

_____

Convenience Receptacle

Converter Tube

Coupling Capacitor

Coupling Transformer

Crystal Diode

Crystal Microphone

Crystal Oscillator

Crystal Pickup

D-C Component

D-C Generator

D-C Instrument

D-C Jack

D-C Motor

D-C Output

Deflecting Electrode

Deflection Coil

Deflection Plate

Deflection Voltage

Deflection Yoke

Distribution Network

Distribution Panel

Double Pole Switch

Duplex Convenience Outlet_____

_____

Electrolytic Capacitor_____

_____

Electromagnetic Coupling_____

_____

Electromagnetic Deflection_____

_____

Electromagnetic Field_____

_____

Electromagnetic Induction_____

_____

Electromagnetic Wave_____

_____

E.M.T. Conduit_____

_____

E.M.T. Coupling_____

_____

E.M.T. Electrometallic Tubing_____

_____

E.M.T. Fittings_____

_____

Field Effect Transistor

Field Excitation

Filament Transformer

Filament Voltage

Filter Circuit

Flexible Metallic Conduit

Fluorescent Lamp Ballast

Frequency Modulation

Gang Tuning Capacitor

Grid Bias

Grounding Electrode

Grounding Equipment_____

_____

Grounding Receptacle_____

_____

Half Wave Rectifier_____

_____

Hole Conduction_____

_____

Induction Coil_____

_____

Induction Motor_____

_____

Insulation Resistance_____

_____

Intermediate Frequency Amplifier_____

_____

Isolation Transformer_____

_____

Kilo Watt Hour Meter_____

_____

Line Voltage_____

_____

Meter Shunt

Mutual Trans Conductance

Non-Metallic Sheathed Cable

Ohms Per Volt Rating

Oscillator Coil

Parallel Resonance

Photo Cell

Photo Current

Photo Electric Switch

Photo Sensitive

Photo Tube

Plate Resistance_____

_____

Plate Resistance_____

_____

Plate Voltage_____

_____

Plug Receptacle Outlet_____

_____

Power Supply_____

_____

Power Transformer_____

_____

Radio Frequency Generator_____

_____

Root Mean Square Voltage_____

_____

Schematic Circuit Diagram_____

_____

Series Circuit_____

_____

Series Field_____

_____

Series Resonance

Service Entrance Cable

Service Entrance Equipment

Shunt Field

Silicon Controlled Rectifier

Single Pole Switch

Solar Cell

Solar Energy

Solderless Wire Connector

Surface Metal Raceway

Time Delay Relay

Toggle Switch

Transistor Characteristic Curve

Tube Socket

Vacuum Tube Characteristic

Vacuum Tube Voltmeter

Video Frequency

Video Tape

Video Tape Recorder

Volt-Ohm-Millimeter

Voltage Divider

Voltage Range Multiplier

Voltage Ratio_____

_____

Voltage Regulation_____

_____

Wheatstone Bridge_____

_____